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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHOU, ALBERT T	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/048,014	HEISS, HERBERT	
	Examiner	Art Unit	
	Albert T. Chou	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 June 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawing is objected to because

- There is no Fig. 1 indication in the drawing as mentioned in the specification.
- The drawing is very confusing for the examination. In the drawing, the OAM cell appears to be inserted into a data cell DPx, which is conflicting to OAM is inserted between DP1 and DP2 as mentioned in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. There is no page number or line number printed in the specification, which makes referencing difficult. The inclusion of the page number and/or line number in the specification is required.

Claim Objections

3. Claims 6, 10 and 14-17 are objected to because of the following informalities:

Claims 6, 10 and 17 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 5.

Claims 14, 15 and 16 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 11, 12 and 13 respectively.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Appropriate correction is required to correct this problem.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,920,558 to Saito et al. (hereinafter "Saito").

Regarding claim 1, Saito teaches an ATM switching method **[Fig. 1; ATM Switch and ATM Switching System]**, which comprises

inserting of the administration maintenance and resource management cells between cells of a virtual link with a guaranteed frame rate **[Fig. 1; col. 4, lines 1-4, 42-45; an OAM cell or RM cell 16 along the same path as that of a user cells 15 is established by inserting the OAM cell 16 between the user cells]** within an ATM communications system and/or ATM communications terminal equipment **[Fig. 1; col. 4, lines 4-10; the insertion can be done from the terminal point of connection 12 or ATM switch]**; and

determining the cell lost priority information of the cell to be transmitted directly of the respective virtual link **[Figs. 4 & 5, Input Cell Processing 7; Identifies required cell processing from ATM header, which includes CLP bit; col. 5, lines 64-66, col. 6, lines, 1-4, 16-18]**, and inserting the cell lost

priority information into the operation administration maintenance and/or resource management cells as current cell lost priority information **[Figs. 4, 5 & 9, Input Cell Processing 7 & Output Cell Processing 8; executes the cell processing in a predetermined sequencer, which applies switching information required such as for rewriting ATM cell headers including CLP; col. 5, lines 66-67, col. 6, lines, 1-4, 8-18, col. 7, lines 31-42]**.

Regarding claim 2, Saito does not expressly teaches that the cell lost priority information of the respective cell can be assigned different loss priorities. However, it is inherent in Saito's ATM switch and ATM switching system that the CLP, Cell Loss Priority, bit in ATM Cell header is used to provide guidance to the network in the event of congestion. A CLP value of 0 indicates a cell of relatively high priority and the cell should not be discarded unless no other alternative is available. A CLP value of 1 indicates that this cell is subject to discard within the network, when necessary, if the network congestion occurs. Assigning a proper CLP value on the cell basis is a fundamental ATM function according to ITU-T and ATM-Forum recommendations, to which most of ATM switch and equipment manufacturers conform so that their products can be inter-working properly with other ATM standard-compliant devices from different manufacturers.

Regarding claims 3 and 7, Saito teaches that the cell lost priority information comprises a one- bit piece of information **[Fig. 2, CLP; col. 4, line 28]**.

Regarding claims 4, 8 and 9, Saito teaches that OAM (Operation, Administration & Maintenance) and RM (Resource Management) cells are structured as OAM (Operation, Administration & Maintenance) and RM (Resource Management) cells according to standard ITU-T 1.610 and ITU-T 1.371 **[Figs. 2 & 3]**.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,920,558 to Saito et al. (hereinafter "Saito") in view of US Patent No. 6,751,295 to Watanabe.

Regarding claims 5, 6 and 10-17, Saito teaches all limitations as recited in the claim rejection to claim 1.

Saito does not expressly teach that in the absence of a cell to be transmitted directly, the virtual link inserts a given standard cell loss priority information into OAM or RM cell as current cell loss priority information.

Watanabe teaches that **[Figs. 1, 5 & 6]** when a congestion at CCD 42 occurs, CCD 42 overwrites a congestion-condition ER value and a congestion notification data to the incoming RM cell and transmits an RM cell, having the

congestion-condition ER value and a congestion notification data, back to CCD 41 when there is no any cell to be transmitted prior to the RM cell **[Figs. 1, 5 & 6; col. 10, lines 50-62; RM cell information is overwritten but the cell header will be given a cell loss priority based on the current state available to CCD 42].**

It would have been obvious to a person of ordinary skill in the art at time of the invention to include Watanabe's teachings for transmitting the RM cell, including the standard cell loss priority information in the cell header, in the absence of cell to be transmitted directly into Saito's invention since both references teach ATM switching and traffic control/monitoring using OAM/RM control cells.

The motivation for combining the reference teachings would be to quickly responding the network congestion situation by transmitting OAM or RM cells for alerting pertinent network components to take the proper action immediately. Since OAM and RM functions are well known in the art, there would be no additional cost increase by applying OAM or RM functions to Saito's invention. The motivation would be a reasonable expectation of success since both references teach OAM and RM cells in ATM switching system.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent No. 6,628,614 to Okuyama et al. disclose "Traffic Control Apparatus And Method Thereof"
- US Patent No. 6,246,687 to Siu discloses "Network Switching System Supporting Guaranteed Date Rates"
- US Patent No. 6,483,839 to Gemar et al. disclose "Apparatus And Method For Scheduling Multiple And Simultaneous Traffic In Guaranteed Frame Rate In ATM Communication System"

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert T. Chou
March 29, 2006 AC

HASSAN KIZOU
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